



Dr. Joe Xie

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Lab Ref BT087222

Client Ref **1170-1251**

Project *

Cost Code

Status Final

Received 14/03/19

Reported 26/04/19

Samples 82

First Sample 1170

Last Sample 1251

Pages 11

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Notes

Authorised by

Wayne Taylor

Laboratory Manager

On behalf of:

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ANALYTICAL REPORT

Scheme	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E
Units	%	%	%	%	%	%
Detection Limit	0.01	0.01	0.1	0.1	0.01	0.1
Upper Limit	90	90	90	90	20	50
	Sn	As	Fe	S	Mn	MgO
1170	<0.01	<0.01	0.6	0.1	<0.01	<0.1
1171	<0.01	<0.01	8.4	0.2	0.11	1.2
1172	<0.01	<0.01	19.2	<0.1	0.57	1.0
1173	<0.01	<0.01	19.6	<0.1	0.56	1.1
1174	<0.01	<0.01	18.9	<0.1	8.11	0.6
1175	<0.01	<0.01	28.9	<0.1	10.62	0.2
1176	<0.01	<0.01	28.3	<0.1	5.60	0.5
1177	<0.01	<0.01	21.7	0.3	2.39	0.9
1178	<0.01	<0.01	33.4	0.4	7.34	0.2
1179	<0.01	<0.01	33.9	0.7	3.99	1.4
1180	<0.01	<0.01	25.7	0.3	3.46	0.8
1181	<0.01	<0.01	13.6	8.6	0.14	2.1
1182	<0.01	0.01	30.6	3.5	5.59	1.5
1183	<0.01	<0.01	11.1	1.6	2.40	8.4
1184	<0.01	<0.01	11.5	0.7	2.09	9.1
1185	<0.01	<0.01	10.0	0.6	1.27	10.6
1186	<0.01	<0.01	8.9	0.2	1.23	10.6
1187	0.01	<0.01	7.6	0.6	1.08	11.0
1188	0.01	<0.01	43.2	0.1	8.04	0.2
1189	0.01	0.01	53.6	<0.1	0.23	0.4
1190	<0.01	0.01	52.6	<0.1	0.33	0.2
1191	<0.01	<0.01	34.7	<0.1	0.23	0.8
1192	<0.01	0.01	22.5	<0.1	0.07	1.0
1193	<0.01	<0.01	15.1	8.8	0.13	2.1
1194	<0.01	<0.01	56.7	<0.1	0.16	0.1
1195	<0.01	0.01	57.5	<0.1	0.14	0.1
1196	<0.01	<0.01	35.0	0.1	0.09	0.6
1197	<0.01	<0.01	3.1	<0.1	0.02	<0.1
1198	<0.01	0.01	23.5	0.2	0.23	0.9
1199	<0.01	<0.01	19.0	<0.1	0.09	1.0
1200	<0.01	<0.01	15.4	0.8	0.04	0.9
1201	<0.01	<0.01	9.1	0.3	0.02	1.0
1202	<0.01	<0.01	34.7	2.9	0.15	0.4
1203	<0.01	<0.01	57.5	<0.1	0.17	<0.1
1204	<0.01	0.02	57.7	<0.1	0.24	<0.1
1205	<0.01	0.02	57.5	<0.1	0.26	0.2
1206	<0.01	0.03	57.1	<0.1	0.14	<0.1
1207	<0.01	0.02	57.5	<0.1	0.30	<0.1

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	XRF75E % 0.01 90 Sn	XRF75E % 0.01 90 As	XRF75E % 0.1 90 Fe	XRF75E % 0.1 90 S	XRF75E % 0.01 20 Mn	XRF75E % 0.1 50 MgO
1208	<0.01	0.02	57.4	<0.1	0.32	<0.1
1209	<0.01	0.01	59.2	<0.1	0.47	<0.1
1210	<0.01	0.02	57.7	<0.1	0.62	<0.1
1211	<0.01	0.03	53.2	<0.1	0.24	<0.1
1212	<0.01	0.02	57.6	<0.1	0.28	<0.1
1213	<0.01	0.02	57.4	<0.1	0.61	<0.1
1214	<0.01	0.02	55.0	<0.1	0.34	<0.1
1215	<0.01	0.01	51.5	<0.1	0.17	0.1
1216	<0.01	0.02	31.1	0.7	6.51	0.3
1217	<0.01	0.02	31.1	2.0	6.78	0.4
1218	<0.01	0.01	33.5	1.7	7.18	0.9
1219	<0.01	0.01	34.2	0.5	8.60	1.4
1220	<0.01	0.01	26.7	2.6	4.07	0.8
1221	<0.01	<0.01	13.4	8.4	0.12	2.0
1222	<0.01	<0.01	0.4	0.1	0.05	0.2
1223	<0.01	<0.01	35.1	1.6	3.87	0.4
1224	<0.01	<0.01	31.0	1.6	3.48	0.5
1225	<0.01	<0.01	33.5	1.7	6.19	1.1
1226	<0.01	<0.01	27.4	3.7	7.36	1.3
1227	<0.01	<0.01	35.0	0.6	9.10	1.8
1228	0.02	<0.01	33.5	1.5	8.64	1.6
1229	0.01	<0.01	34.8	0.7	9.11	1.8
1230	<0.01	<0.01	36.3	0.4	9.44	2.2
1231	<0.01	<0.01	33.8	0.7	9.83	2.4
1232	<0.01	<0.01	32.1	0.8	9.79	2.4
1233	<0.01	<0.01	34.0	0.2	10.28	2.3
1234	<0.01	0.01	34.0	1.1	7.65	1.6
1235	<0.01	<0.01	36.1	0.2	7.18	1.2
1236	<0.01	<0.01	33.5	<0.1	9.13	1.8
1237	<0.01	<0.01	35.1	0.5	8.81	1.9
1238	0.01	<0.01	33.8	1.2	8.47	1.9
1239	<0.01	<0.01	32.4	0.4	8.38	2.1
1240	<0.01	<0.01	30.5	0.8	8.57	2.2
1241	<0.01	<0.01	38.3	0.2	5.26	0.3
1242	<0.01	<0.01	37.8	0.1	4.92	0.2
1243	<0.01	<0.01	30.8	4.2	3.63	0.3
1244	<0.01	<0.01	1.1	<0.1	0.12	<0.1
1245	<0.01	<0.01	34.7	0.6	9.32	1.8
1246	<0.01	0.01	25.9	5.7	3.07	0.4

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	XRF75E % 0.01 90 Sn	XRF75E % 0.01 90 As	XRF75E % 0.1 90 Fe	XRF75E % 0.1 90 S	XRF75E % 0.01 20 Mn	XRF75E % 0.1 50 MgO
1247	<0.01	<0.01	36.1	0.2	9.08	1.8
1248	<0.01	<0.01	12.2	8.9	0.16	2.0
1249	<0.01	<0.01	36.0	0.1	8.49	1.7
1250	<0.01	<0.01	35.5	<0.1	9.05	2.0
1251	<0.01	<0.01	32.3	0.5	9.31	3.0

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Scheme	XRF75E	XRF75E	XRF75E	XRF75E	XRF75E	AAS40Q
Units	%	%	%	%	%	PPM
Detection Limit	0.1	0.01	0.01	0.01	0.01	2
Upper Limit	50	5	50	5	5	200
	Ca	WO3	Cu	Pb	Zn	Ag
1170	<0.1	0.02	<0.01	0.02	<0.01	<2
1171	<0.1	<0.01	<0.01	1.41	0.34	31
1172	<0.1	<0.01	<0.01	0.93	0.50	5
1173	<0.1	<0.01	<0.01	1.30	0.52	3
1174	0.4	<0.01	<0.01	3.67	0.92	18
1175	1.1	<0.01	<0.01	2.82	1.08	25
1176	0.9	<0.01	<0.01	3.26	0.93	22
1177	0.4	0.01	<0.01	3.12	0.69	62
1178	1.0	<0.01	<0.01	2.13	1.25	10
1179	2.1	<0.01	<0.01	0.52	0.97	6
1180	0.8	<0.01	<0.01	0.87	0.94	11
1181	3.7	<0.01	0.25	1.15	2.49	25
1182	2.7	<0.01	<0.01	0.34	1.71	<2
1183	11.4	<0.01	<0.01	0.06	0.51	<2
1184	15.8	<0.01	<0.01	0.14	0.61	<2
1185	18.2	<0.01	<0.01	0.29	0.37	<2
1186	18.7	<0.01	<0.01	0.03	0.31	<2
1187	19.3	<0.01	<0.01	<0.01	0.06	<2
1188	0.2	<0.01	0.01	4.40	0.91	25
1189	0.3	<0.01	<0.01	1.67	0.74	12
1190	<0.1	<0.01	<0.01	1.43	1.02	14
1191	<0.1	<0.01	<0.01	0.86	0.59	16
1192	<0.1	0.02	<0.01	0.69	0.42	16
1193	4.4	<0.01	0.27	1.08	2.57	22
1194	<0.1	<0.01	0.01	1.12	0.97	3
1195	<0.1	<0.01	<0.01	1.13	1.04	4
1196	<0.1	<0.01	<0.01	1.21	0.66	29
1197	<0.1	<0.01	<0.01	0.03	0.02	<2
1198	<0.1	<0.01	<0.01	>5.00	0.46	2
1199	<0.1	<0.01	<0.01	1.56	0.39	3
1200	<0.1	<0.01	<0.01	1.11	0.31	7
1201	<0.1	<0.01	<0.01	1.06	0.18	4
1202	<0.1	<0.01	0.03	>5.00	2.86	161
1203	<0.1	<0.01	<0.01	1.54	0.67	16
1204	<0.1	<0.01	<0.01	1.44	0.71	5
1205	<0.1	<0.01	0.01	1.32	0.77	<2
1206	<0.1	<0.01	<0.01	1.55	0.88	2
1207	<0.1	<0.01	<0.01	1.52	0.70	6

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	XRF75E % 0.1 50 Ca	XRF75E % 0.01 5 WO3	XRF75E % 0.01 50 Cu	XRF75E % 0.01 5 Pb	XRF75E % 0.01 5 Zn	AAS40Q PPM 2 200 Ag
1208	<0.1	<0.01	<0.01	1.65	0.63	6
1209	<0.1	<0.01	<0.01	2.41	0.55	22
1210	<0.1	<0.01	<0.01	2.54	0.40	7
1211	<0.1	<0.01	0.01	3.34	0.57	3
1212	<0.1	<0.01	0.01	2.51	0.61	3
1213	<0.1	<0.01	<0.01	1.23	0.38	4
1214	<0.1	<0.01	<0.01	1.95	0.79	5
1215	<0.1	<0.01	<0.01	0.97	0.66	18
1216	0.3	<0.01	<0.01	0.40	1.35	<2
1217	0.5	<0.01	<0.01	1.50	2.38	3
1218	0.6	<0.01	<0.01	0.57	1.55	3
1219	0.6	<0.01	<0.01	0.25	0.69	<2
1220	0.9	<0.01	<0.01	0.94	1.17	5
1221	3.9	<0.01	0.28	1.15	2.53	23
1222	<0.1	<0.01	<0.01	<0.01	0.01	<2
1223	1.0	<0.01	<0.01	0.58	1.06	<2
1224	1.0	<0.01	<0.01	0.37	1.12	8
1225	0.8	<0.01	<0.01	1.61	1.76	9
1226	0.3	<0.01	<0.01	>5.00	0.31	89
1227	0.3	<0.01	<0.01	2.94	0.18	13
1228	0.4	<0.01	<0.01	4.50	0.79	21
1229	0.3	<0.01	<0.01	2.57	0.28	11
1230	0.5	<0.01	<0.01	0.63	0.42	3
1231	0.5	<0.01	<0.01	0.94	0.71	5
1232	0.6	<0.01	<0.01	0.93	0.62	4
1233	0.5	<0.01	<0.01	0.21	0.18	<2
1234	0.8	<0.01	<0.01	1.47	0.47	9
1235	1.5	<0.01	<0.01	0.06	0.85	<2
1236	0.4	<0.01	<0.01	0.66	0.10	4
1237	0.5	<0.01	<0.01	1.88	0.17	9
1238	0.4	<0.01	<0.01	3.78	0.21	21
1239	0.5	<0.01	<0.01	0.29	0.13	3
1240	0.5	<0.01	<0.01	1.43	0.43	9
1241	1.6	<0.01	<0.01	0.30	1.15	<2
1242	1.8	<0.01	<0.01	0.04	0.61	<2
1243	1.6	<0.01	<0.01	0.57	1.75	<2
1244	<0.1	<0.01	<0.01	0.02	0.04	<2
1245	0.9	<0.01	<0.01	0.21	0.60	<2
1246	1.3	0.01	<0.01	1.19	1.44	7

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	XRF75E % 0.1 50 Ca	XRF75E % 0.01 5 WO3	XRF75E % 0.01 50 Cu	XRF75E % 0.01 5 Pb	XRF75E % 0.01 5 Zn	AAS40Q PPM 2 200 Ag
1247	0.5	<0.01	<0.01	0.44	0.22	3
1248	4.6	<0.01	0.26	1.06	2.51	26
1249	0.6	<0.01	<0.01	0.81	0.18	6
1250	0.4	<0.01	<0.01	0.25	0.05	<2
1251	0.5	<0.01	<0.01	1.83	0.12	11

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Scheme	AAS40Q	AAS43B	AAS43B
Units	PPM	%	PPM
Detection Limit	2	0.01	50
Upper Limit	200	40	40000
	Ag(R)	Pb	Ag
1170			
1171			
1172			
1173			
1174			
1175			
1176			
1177			
1178	8		
1179			
1180			
1181			
1182			
1183			
1184			
1185			
1186			
1187			
1188			
1189			
1190			
1191			
1192			
1193			
1194			
1195			
1196			
1197			
1198		5.02	
1199			
1200	9		
1201			
1202		11.8	160
1203			
1204			
1205			
1206			
1207			

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	AAS40Q PPM 2 200 Ag(R)	AAS43B % 0.01 40 Pb	AAS43B PPM 50 40000 Ag
1208			
1209			
1210			
1211			
1212			
1213			
1214			
1215			
1216			
1217			
1218	2		
1219			
1220			
1221			
1222			
1223			
1224			
1225			
1226		17.6	
1227			
1228			
1229			
1230			
1231			
1232			
1233			
1234			
1235			
1236			
1237			
1238			
1239			
1240			
1241			
1242			
1243			
1244			
1245			
1246			

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	AAS40Q PPM 2 200 Ag(R)	AAS43B % 0.01 40 Pb	AAS43B PPM 50 40000 Ag
1247			
1248			
1249			
1250	<2		
1251			

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DESCRIPTION

AAS40Q : AAS after DIG40Q
AAS43B : AAS after DIG43B
CRU20 : Coarse Crushing, 6mm
CRU22 : Crush >3.5kg, 10 Mesh (2mm), Per kg
DIG40Q : 4 Acid Digest 0.2g-20ml
DIG43B : 4 Acid Digest 0.25g-500ml
DRY10 : Sample Drying, 105°C, <3.5kg
PUL45 : Pulv, Cr Steel, 75µm, 250g
SPL26 : Riffle Splitting, Per kg
XRF75E : Pressed Powder XRF (2g+12g diluent)